Abstract

Unstable external environment, unfavorable market conditions and escalating global competition necessitate developing new management technologies to overcome the disproportionality in the economic systems functioning. The polystructural properties of the national tourism system (NTS), as a significant component of the national economic system, require multisubject management. The multisubject management process ensures a balanced interplay of its constituent elements and the coherence of economic entities’ interests. Accordingly, the purpose of the article is to study the essence of multisubject NTS management.

It is revealed that multisubject NTS management is the process of forming and developing mutually coordinated and effective interaction of subjects of the public and private sectors, as well as consumers for the consolidated creation of tourism product based on constructive inter-subject communication.

The main groups of entities that have a managerial influence on the national tourism system, that is form multisubject management, are identified. On this basis, the configuration of multisubject NTS management and the structural and logical scheme for coordinating its participants’ interests are proposed. Given the NTS polystructural properties, the definition of the synergistic effect of integrated cooperation in the format of multisubject management is proved. According to the study results, a step-by-step procedure for estimating multisubject management is proposed, which determines the interaction level and the vector of equilibrium of the NTS entities.

INTRODUCTION

The phenomenon of the national tourism system (NTS) is determined by global changes, which complicates the scope of application problems by the entities that form it. While defining the national tourism system as a complex, integral and integrated formation within the structure of the national economic system, it should be noted that nowadays the coherence of economic and social interests of the entities that evolve in the system of interconnections in accordance with their objectives is the key factor of the NTS success and competitive advantage in a globalized world. The need to improve the existing scientific approaches to the NTS management and develop new ones is, a priori, an area of widespread research interest. This interest is based on the epistemological tradition to comprehend socio-economic transformations of social development.

Therefore, in the unstable environment, unfavorable market conditions and under intensified competition, there is a growing need to develop new management technologies to overcome the disproportionality in the functioning of the NTS subsystems. If there is no seamless
cooperation on the relationship results, then in order for the tourism market subjects to function successfully, it is extremely important to coordinate their economic interests. In view of this, it is essential to establish mutually beneficial economic relations for the entities that form the NTS and interact in this system for the purpose of resource and information exchange. This determines the relevance of analyzing multisubject management, the concept of which is in line with the strategic understanding of the need to consider mental, institutional, cultural and informational influences on the interests and interrelations of the tourism market subjects.

In view of this, it is necessary to determine preventively the strategic interests of stakeholders under the economy globalization, which changes the ratio in the interests of different subject groups and reconfigures relationships with the growing need for interdisciplinary research, taking into account the interpenetration of the results of fundamental and applied sciences, with shifting management emphasis towards forward-looking response to problem situations. And that makes sense, because, according to Zhalilo, economic growth is an indicator of the effective long-run self-regulatory processes. After all, their basis is formed through reconciling the interests of private economic actors with the public interest and among themselves, and they, in turn, are based on the need for constant growth (Zhalilo, 2003, pp. 5-6).

Consequently, economic activity, dynamism and scale of the NTSs determine the multifunctional nature of the activity associated with the consolidated formation of the tourism product based on constructive inter-entity interaction, which manifests itself in a high autonomy and significance of all the NTS components. That is why, a scientific request for the theoretical understanding of factors that determine the developing new approaches to multisubject management is currently an important vector for this research.

1. LITERATURE REVIEW

Giddens’ theory of structuring can be considered as the basis for creating multisubject management. This theory makes it possible to analyze how the actions of the subjects are fixed in structures, and vice versa, how structures affect the actions of subjects (Giddens, 1984, p. 29). Cerny (2010) points to the fact that the modern world market is characterized by the spread of actors and the emergence of new forms of global governance. And although government and intergovernmental institutions can still be the basis for many international political decisions, non-state entities and new management mechanisms increasingly influence the global policy results.

Similarly, Steurer (2013) substantiates the model of institution management. According to this model, three main subjects (actors), namely representatives of the state, the market and civil society, have common goals or corporate interests and cooperate in different ways. Moreover, this interaction is mutually beneficial and has some effect. According to Jordan, Wurzel, and Zito (2003), Biermann and Pattberg (2008), Newell, Pattberg, and Schroeder (2012), the main reason for the need to involve non-state entities in the government management mechanism (i.e., the emergence of multisubject management) is the state’s inability to respond to different challenges and neo-liberal privatization ideas in order to increase the management efficiency. In turn, non-state actors, while uniting with the aim to achieve their own and common objectives, create the network of management subjects. Practical use of multisubject management has emerged at the beginning of the 21st century, since the need to transform traditional systems of public administration is due not only to the amount of accumulated local problems (including in the West), but also great political and economic challenges that have resulted in global post-industrial civilization (Zabeivorota, 2016).

The use of multisubject management is typical for European countries. In particular, the European management system itself is considered multisubject. It is explained by the fact that all public actors operating on a European level
participate directly or indirectly in developing a pan-European policy through public consultation procedures. These are European governmental institutions, public administration and local government bodies of the EU member states, representatives of the private sector and public organizations (Korzhenko, 2011, p. 15). To continue the theme, multisubjectivity in public administration is defined as the existence of several interrelated managerial influence centers, whose interaction creates the multicentric structure of the management entity (Khashaieva, 2011, p. 7).

Summarizing the above-mentioned, one can assume that the multisubject NTS management reveals the peculiarities of mutually coordinated and productive interaction of entities that have certain competencies and powers and are the centers of influence on the NTS functioning and development. That is, it is not a chaotic set of elements, but a system of interconnected stable communications and components that are arranged in a certain sequence and form the environment for interaction between the NTS management subjects.

In Ukraine, the analysis of the communicative paradigm of public management by Korzhenkov and Khyshaieva (2011–2013) is the prerequisite for studying multisubject relations. The study of multisubject management should be considered as stakeholder relationship in the format of a relationship network for the possibility to influence their economic and social interests (Rowley, 1997, pp. 890-901).

Investigating the tendencies of the multisubject management formation as a subject of scientific knowledge on the basis of the “management subject – polysubject environment” paradigm is an important scientific task aiming at adapting management to rapidly changing environment as a result of harmonization of interests and actions of internal and external stakeholders taking into account the consumer needs.

Regarding tourism, many studies point out the need to take into account the interests and cooperation of various stakeholders in order to successfully implement tourism projects, the role of local government in tourism processes (Siti-Nabiha, 2015; Bowen, 2016; Saito, 2017) and the positive impact on economic growth (Van der Schyff, 2019), the development of innovative tourism processes, including volunteering and their impact on various aspects of the tourism area (Tomazos, 2010). This in turn promotes the emergence and development of multisubject management.

In the integrative NTS, the need for balanced development of all functional processes is the most relief, and most important thing in multisubject management is the fact that this management process proceeds from the integration principle and leads to qualitative improvement of strategic and operational decisions through focusing common efforts on key determinants of the NTS development. That is why identifying the substantive content of the multisubject NTS management is important not only because the tourist market is highly competitive, but also because the interests of the entities are the basis for the balanced functioning of the NTS, which ensures the tourism product creation based on mutually coordinated and effective interaction of participants in the public and private sectors and the client environment.

2. RESEARCH OBJECTIVE

The purpose of the article is to substantiate the essence, conceptual foundations and priority of the formation and application of multisubject management in the national tourism system.

3. RESEARCH TECHNIQUE

In the course of the research, a set of scientific techniques and approaches was used: systemic, communicative, structural and functional, analysis and synthesis, comparisons and others. In particular, based on the abstract and logical method, social relations sectors and their visualization are analyzed based on the Welch and Wilkinson (2004) model. Using the ARA model (Bolman, 2005), which allows comparing the effectiveness of individual NTS subjects with the consolidated effectiveness, it is proposed to assess the strategic effectiveness of the NTS subject interaction. Given the importance of the multisubject control for the subject interaction in achieving their goals,
the need is determined to use expert studies, in particular, the concept of mutual expectations of economic agents by Kleiner (2004) and the index of balance of interests (IZI) as an indicator of changes that determine solution within the existing alternatives to satisfy the NTS subject interests. According to the fragmentary study of the participant interaction in multisubject NTS management, possible types of their interaction were identified.

4. RESULTS

Multisubject management is determined by the boundaries of the multi-agent interaction space (human, client, resource, process, innovation capital of the tourism system, tourist products, etc.) to reconcile the interests of entities forming the NTS.

Multisubject management entities, due to their position in the system of economic, managerial, organizational, financial and social relations, can influence the NTS. Management entities through information and communication channels influence one another mutually (managerial decision). This provides feedback and makes it possible to achieve both consolidated and individual goals. Subjects form the appropriate economic, organizational, methodological and informational environment for reaching the multisubject management goal, which is specified depending on the system characteristics. In particular, it allows for the accumulation, distribution and use of consolidated knowledge bases and resources to implement business and other processes and support management decision making within the NTS. The tasks of multisubject NTS management are to identify and structure multicentric entities, consolidate resources and interests, provide communication, exchange communication and material flows. All this determines its nonlinear, efficient and balanced functioning.

Consequently, multisubject NTS management is the process of forming and developing mutually coordinated and effective interaction of subjects of public and private sectors, as well as consumers for the consolidated formation of a tourism product based on constructive intersubject communication, which will allow:

- to unambiguously interpret events occurring in the NTS environment due to taking into account all components of this system;
- to predict the reaction of subjects to the NTS structure deformation;
- to identify and formalize the relationships between participants;
- to formulate and develop consolidated strategic potential;
- to reduce transaction costs and increase the efficiency of tourism-recreational, economic, social and other consolidated capacities and strategic opportunities;
- to avoid contradictions and conflicts based on creating a multi-agent consolidated information space for the NTS participants to interact.

Proceeding from the NTS essence as an economic system, it is possible to identify the following main groups of actors that interact and have a mutual influence on the functioning and results of the NTS, i.e., form multisubject management:

- public sector: central, regional and local authorities, public corporations, non-government non-profit self-governing citizens’ organizations, inter-ministerial and advisory bodies, international institutions, volunteer associations, media, scientific and educational institutions;
- private sector: subject groups: 1) production of tourism product (tour operators, travel agents, experts and personal guides on tourism, hotels, restaurants, transport, insurance, banking, sports, recreational, entertainment and leisure establishments); 2) providing agents (infrastructure objects, communications, information and communication networks, life support systems); 3) auxiliary agents (labor exchanges, consulting, legal institutions);
- client environment: individual and group consumers (tourists).

While interpreting the Welch and Wilkinson (2004) model, visualization of multisubject NTS
management model can be offered (see Figure 1). Considering the configuration of multisubject NTS management, it is necessary to point out the appropriateness to allocate non-state actors (as opposed to traditional state-owned ones).

Forms of subject participation in multisubject management stipulate their involvement in advisory bodies, creation of public platforms, tourism clusters, public and private partnerships. Public-private partnership (PPP) is one of the most common forms, which presents the relationship of state authorities and public organizations with private entities and is one of the effective mechanisms for solving problems of accelerated development of promising types and spheres of economic activity, regions and destinations (Bosovska, 2015, p. 485). Respectively, a public-private partnership has been created as a remedy for insufficient funds that were intended for providing public services by the public sector and as a form of increasing the efficiency of public service (Łakomy-Zinowik et al., 2016, p. 157). Different forms of cooperation between multisubject NTS management participants will

Figure 1. Configuration of multisubject NTS management
allow solving urgent social problems on the basis of active diversified interaction in the area of equality, mutual benefit and respect. Such interaction can simultaneously ensure the efficiency and stability of economic growth combined with the optimal cost-benefit ratio and the results obtained for a long period for its participants. Moreover, such a public-private “cooperation among market participants on a local scale ... may become a basis for creating a cooperation network of a regional, national and international scope and significance” (Hajduga et al., 2018, p. 93). Figure 2 gives a scheme of coordinating the interests of multisubject NTS management participants.

Integrated multi-agent structure of multisubject NTS management involves cooperation of multisubject management actors, which differ in terms of:

1) goals of functioning;
2) content and principles of activity;
3) scope of activities.

Taking into account that the most noticeable transformations in the tourism market are due to shifting the emphasis in economic competition not towards resources, but to consumers who

Figure 2. Communication and information field for reconciling the interests of the multisubject NTS management subjects
differ significantly in their activity of purchasing tourism products, the consumer (client environment) is the most controversial and least predictable element of NTS. This statement is based on the fact that the irrational and existential values that are a priori on the tourist mind, to a greater extent are realized through his consumer culture to meet his needs. In particular, when making a decision on the choice of one or another destination (resort, region, country), the tourist thus influences its development. Given the active use of information technology, consumers use Internet resources. In addition, by choosing a certain destination for a trip, tourists thus influence the NTS, which can be considered as managerial, because they:

- contribute to its formation and development as a tourist destination (the growth of tourist flows transforms a certain territory into a tourist destination);
- form requests for institutions of power;
- increase concentration and impact on environment, transport, communal and logistics systems;
- cause institutions of power and commercial enterprises to create, modernize and develop infrastructure, provide services, etc.;
- form and increase the needs for goods and services, helping to expand the scale of business;
- form the destination image;
- promote the transformation of culture, traditions of both the local population and the donor regions of tourists (those forming the tourist flows);
- assess the quality level of the consolidated tourism product and its components.

Consequently, the consumer is the regulator of the NTS subject interests. Therefore, ensuring their coordination and regulation should be provided by the principles of the multisubject NTS management. These principles should include: participation of all interested parties; transparency and openness; social and economic responsibility; accountability; justice; efficiency; performance; economic feasibility; consolidation of efforts; coherence; complementarity; harmonization of interests; development balance; self-organization; process congruence; trust; consumer orientation; target orientation; human resource attraction; balance and adaptability; flexibility; perspective and strategic orientation; uniqueness; competence.

Based on the above, one can determine the main features of multisubject NTS management:

- the main parties to the intersubject relations are the public and private sectors, the client environment, and their logical combination: motives (to whom?) – participants (who?) – environment (where?) – resources (what?) – functions and processes (how?) – time (when?) – results (for what?);
- significant number of heterogeneous management subjects, their polystructural properties;
- symmetry of participants (agreement of the parties) and management asymmetry (through subordination);
- formalization of the entities interaction takes place on the basis of agreements, contracts and arrangements in the presence of dialogical and coordinating information and communication links for the distribution of risks, costs, responsibilities and results of activities between the parties;
- partner, equal and interdependent cooperation of participants on the basis of parity, balance of interests, goals and organizational competences;
- focus on the long-term relationships, rational functioning, coherence, manageability and preventive development;
- clearly expressed publicity, commitment to meeting social needs;
- socio-economic and ecological efficiency.

Given that the multisubject NTS management reflects the subjects’ desire to reconcile their inter-
ests, one can note that this process should provide: the assessment of the strategic effectiveness of the actor interaction; diagnostics of the objectives of multisubject management participants; the ability of multisubject management participants to adjust existing relationships; the development of alternatives to balance the relationship in the NTS system.

By specifying the above tasks, it is proposed to assess the strategic effectiveness of the actor interaction based on the ARA model (ARA means: actors, resources and activities). This model reveals how the communication and information space components (economic, strategic and behavioral) cause the synergistic effect of the actors on the sum of the effects of their autonomous activity (Bolman, 2005, pp. 20-45):

\[ E' = A - (A^{Pb} + A^{Pr} + A^{C}), \]

where \( E' \) – synergistic effect, \( A \) – effect of consolidated activity of the NTS subjects; \( A^{Pb}, A^{Pr}, A^{C} \) – effects of autonomous activity of participants: \( A^{Pb} \) – public sector actors, \( A^{Pr} \) – private sector actors, \( A^{C} \) – client environment subjects.

In the format of multisubject NTS management, the definition of the synergistic effect is also conditioned by the successful interaction of the subjects. That is, a synergistic effect arises where, due to the interaction and consistent development of participants (actors, partners) quantity, according to the system approach, the level of uncertainty in interactions is reduced:

\[ N(I_1 + \ldots I_n) < N(I_1) + \ldots N(I_n), \]

where \( N \) – degree of uncertainty in the process of interaction, \( I_1 \) … \( I_n \) – separate elements of the system (actors) entering into interaction, \( n \) – number of actors involved in the creation of interaction.

Using the ARA model will allow comparing the autonomous (individual) efficiency of individual NTS subjects with the consolidated one (and within the consolidated efficiency, to determine each entity contribution).

As already stated above, assessing the subject interaction in achieving their goals should be an important aspect of implementing multisubject NTS management. In this regard, it is proposed, based on the ranking, to systematize and evaluate the goals of the participants in the hierarchy relative to the objectives of other hierarchical levels. The structuring of the participants’ goals in the multisubject NTS management according to the level of their achievement is given in Table 1.

It is recommended that the diagnostics of the objectives of the multisubject NTS management participants be carried out on the basis of expert research, which will enable them to make qualitative characteristics quantitative. The procedure for quantifying alternative options for achieving goals (projects, plans) can be formalized as follows:

\[ U^{(1)} = C_{0.1.1.1} \cdot U^{0.1.1.1} + \]
\[ + C_{0.1.1.2} \cdot U^{0.1.1.2} + \ldots \]
\[ + C_{0.p.t.z} \cdot U^{0.p.t.z}, \]

Table 1. A fragment of structuring the objectives of the multisubject NTS management actors by the level of their fulfillment

<table>
<thead>
<tr>
<th>Level of hierarchy within the achievement of the general objective</th>
<th>Objective tree level for assessing the project efficiency</th>
<th>Contents of the hierarchy level</th>
<th>Contents of elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>–</td>
<td>General objective</td>
<td>Strategic objective that determines all actors’ behavior</td>
</tr>
<tr>
<td>I</td>
<td>0</td>
<td>Blocks of the actors’ objectives</td>
<td>Quantity of objectives of each participant (they have different impacts on the general objective fulfillment)</td>
</tr>
<tr>
<td>II</td>
<td>I</td>
<td>Objectives</td>
<td>Objectives of some groups of actors</td>
</tr>
<tr>
<td>III</td>
<td>II</td>
<td>Sub-objectives</td>
<td>Sub-objectives of some groups of actors</td>
</tr>
<tr>
<td>IV</td>
<td>III</td>
<td>Alternatives</td>
<td>Cooperation options for participants having different goals</td>
</tr>
</tbody>
</table>

Source: Developed by the authors.
where \( C_{0.1.1.1}, C_{0.1.1.2}, \) and \( C_{optz} \) – coefficients of the criteria significance for reaching the general objective, obtained by combining the coefficients of the degree of the group influence on achieving the goal and its role for the participants, \( U_{0.1.1.1}, U_{0.1.1.2}, \) and \( U_{optz} \) – criteria for the alternative option utility for achieving the corresponding objectives (0.1.1.1; 1.1.2; 0.p.t.z), \( n \) – the number of subjects involved in creating interaction.

Thus, the diagnosis of the goals of the NTS relationship participants is inherently a diagnosis of multisubject management, since it makes it possible to determine the level of their objectives fulfillment in general and independently for each of the subjects to take managerial measures towards adjusting goals and objectives.

It is proposed to quantify the interests of the multisubject NTS management participants and their intentions to adjust the existing relationships based on the concept of mutual expectations of economic agents, described by Kleiner (2004). The essence of the concept is in the fact that the system of mutual expectations, penetrating the entire economy, is a kind of connecting link that ensures the unity and integrity of society both horizontally, that is, in the interaction of existing agents, and vertically, that is, in a timely manner. Almost every active subject is in a state of expectation from other subjects and their groups and expects the manifestation of their behavior, the possible reaction to any given factors, in particular their own actions. High value of the interest balance may be accompanied by its significant fluctuations in dynamics, while its relative low value is constant to some extent. From these positions, to quantify the expectation of the results of the subject interaction, the characteristics of expectations are determined in relation to each result received by them.

To develop alternatives for balancing relationships in the system of multisubjective NTS management, the index of balancing interests (IZI) can be used as an indicator of change that determines the solutions within the existing alternatives to meet the interests of NTS subjects. Components obtained on the basis of an expert approach that form the index are weighed against the strength of the potential impact on the NTS. The final index value is defined as:

\[
IZI = \frac{A - |B|}{A + |B|},
\]

where \( A \) – weighted average amount of positive elements of the index, \( |B| \) – average weighted amount of the negative elements of the index.

The index is in the range of \(-1 \) to \(+1\). The IZI ranking is provided: from \(-1 \) to 0 is a conflict type of interest balance; from 0 to +0.5 is compromise; from +0.6 to +1 is complementary. If, as a result of the index analysis, processes causing an imbalance of interests with certain groups of NTS actors are revealed, \( |B| \) will increase, and IZI will decrease.

Consequently, the aim of the multisubject NTS management analysis is to generalize the received matching parameters between the desired balance parameters and the achieved relationships during this period. The possibility of finding such conformity is realized in the creation of an effective system of coordinating NTS subjects’ interests and is based on a reasonable choice of the appropriate type of interaction.

Below are the results of a fragmentary study of multisubject NTS management. Representatives of the public sector (heads of central, local authorities of Kyiv, non-government self-governing citizens’ organizations, scientific and educational institutions) and private sector (actors involved in the formation and realization of a tourist product) have formed the sample. The sampling is representative. Table 2 presents the results of the participant interaction in the multisubject NTS management.

According to the survey results and while applying the index of balance of interests (IZI) on its basis, the possible types of interaction are: conflict, complementary and compromise. Conflict interactions are revealed between private sector actors and explained by factors of competition and lack of strategic understanding of the cooperation benefits. This type of interaction is also found between participants in the private and public sectors and is associated with certain bureaucratic aspects. Future relationships require the use of communication tactics. Complementary interaction involves the activities complementarity.
It is revealed between the participants of the public and private sectors in the planning of the NTS development and requires the strengthening and use of integration tactics. While analyzing inter-subject relations between individual private sector actors, compromise interaction has been found, which involves a high level of communication and is the logical result of their cooperation.

As a result of the multisubject management implementation, each NTS subject receives additional benefits: consumers – reducing the cost and time spent searching for tourist products and their satisfaction; private sector actors – additional profits due to reduced transaction costs, synergistic benefits; formation, redistribution and use of strategic resource capacity, entry into potential markets, effective inter-subject communication; public sector actors – the possibility of more efficient use of tourist and recreational potential of destinations, popularization of Ukraine and regions as tourist destinations; attraction of tourists to tourism destinations; implementing strategies and programs in the field of tourism, legislative provision, infrastructure development, project initiation and investment attraction. Summarizing the above, one could argue that multisubject management reveals the objective balance of relations between NTS participants, which makes it possible to create real managerial bases for coordinated actions, objectives fulfillment and balanced consolidated functioning as a significant determinant of developing its subjects in the current complex environment.

**Table 2. The results of interaction of the multisubject NTS management actors**

<table>
<thead>
<tr>
<th>Binary interaction subjects</th>
<th>Interaction configuration</th>
<th>Index of balance of interests (IZI) of some NTS subjects</th>
<th>Interaction types</th>
<th>Recommended tactics for NTS subjects integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject (private sector actor (Pr1) → private sector actor (Pr2))</td>
<td>Subject ↓ High level of dissatisfaction with the interaction</td>
<td>-0.57</td>
<td>Conflict</td>
<td>Communication</td>
</tr>
<tr>
<td>Subject (private sector actor (Pr1) → private sector actor (Pr3))</td>
<td>Subject ↓ High level of satisfaction with the interaction</td>
<td>0.44</td>
<td>Compromise</td>
<td>Economic</td>
</tr>
<tr>
<td>Subject (public sector actor (Pb1) → private sector actor (Pr2))</td>
<td>Subject ↓ High level of dissatisfaction with the interaction</td>
<td>-0.76</td>
<td>Conflict</td>
<td>Communication</td>
</tr>
<tr>
<td>Subject (public sector actor (Pb1) → private sector actor (Pr3))</td>
<td>Subject ↓ High level of satisfaction with the interaction</td>
<td>0.89</td>
<td>Complementary</td>
<td>Integrative</td>
</tr>
</tbody>
</table>

**CONCLUSION**

Under highly dynamic changes in the environment requirements, multisubject management is the product of the latest management theories.

Understanding the consolidated interests of the NTS subjects according to their coherence makes it possible to establish that their methodological maturity is determined by multisubject management, which ensures the coordination of partner entities that have the competence to make managerial decisions aimed at achieving the synergistic effect of NTS for the Ukrainian economic system. Multisubject management reflects the imperatives of subjects’ economic development and allows to interpret it as a movement towards balanced development or deviation from it by the results of the exogenous influences and endogenous violations of tourist market coordination.

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